## SERVICES AND SUPPORT

Datalogic provides several services as well as technical support through its website. Log on to **www.datalogic.com** and click on the links indicated for further information including:

- **PRODUCTS**

  Search through the links to arrive at your product page where you can download specific **Manuals** and **Software & Utilities** including:

  - **Datalogic Aladdin™** a multi-platform utility program, which allows device configuration using a PC. It provides RS232/USB-COM interface configuration as well as configuration barcode printing.

- **SERVICES & SUPPORT**

  - **Datalogic Services** - Warranty Extensions and Maintenance Agreements
  - **Authorised Repair Centres**

- **CONTACT US**

  E-mail form and listing of Datalogic Subsidiaries

## WARRANTY

Datalogic warranties this product against defects in workmanship and materials, for a period of 3 years from the date of shipment, provided that the product is operated under normal and proper conditions.

Datalogic has the faculty to repair or replace the product; these provisions do not prolong the original warranty term.

The warranty does not apply to any product that has been subject to misuse, accidental damage, unauthorized repair or tampering.

DATALOGIC

# Dragon™ D131

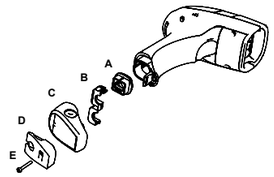
## READERS

## QUICK REFERENCE

820001771 (Rev. A)

## CONNECTIONS

### CONNECTING THE CABLE




A. Rubber boot
B. Rubber boot clip
C. Cover
D. Strain relief
E. Screw

① Slip the cover over the cable.

② Push the rubber boot completely over the connector. Take care that the rubber boot mark is aligned to the connector clip.

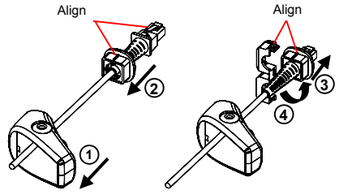
③ Pull the rubber boot towards the connector until it covers and is flush with the connector moulding.

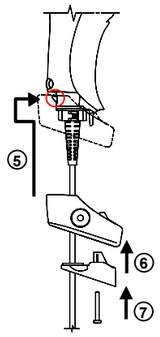
④ Lock the rubber boot clip around the rubber boot aligning them as shown in the figure.

⑤ Insert the assembly (connector + rubber boot locked through clip) into the reader connector. Push the cover along the cable towards the reader handle and make it hook over the yellow tooth therefore closing the handle.

⑥ Insert the strain relief into the cover.

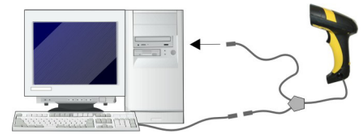
⑦ Insert the screw into the strain relief and tighten to fix the whole assembly to the reader handle.



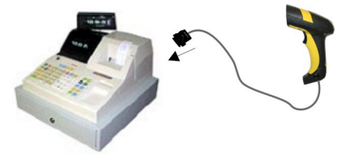

**USB**

**WEDGE**



**RS232**

**PEN**



**DATALOGIC S.p.A.,**
**Via Candini, 2**
**40012 - Lippo di Calderara**
**Bologna - Italy**

CE 06

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**DRAGON Dxxx**

e tutti i suoi modelli
and all its models
et tous ses modèles
und seine Modelle
y todos sus modelos

sono conformi alle Direttive del Consiglio Europeo sottoelencate:
are in conformity with the requirements of the European Council Directives listed below:
sont conformes aux spécifications des Directives de l'Union Européenne ci-dessous:
den nachstehenden angeführten Direktiven des Europäischen Rats:
cumple con los requisitos de las Directivas del Consejo Europeo, según la lista siguiente:

**89/336/EEC EMC Directive** e **and** et **und** y **92/31/EEC, 93/68/EEC** emendamenti successivi / further amendments / ses successifs amendements / späteren Abänderungen / sucesivas enmiendas

Basate sulle legislazioni degli Stati membri in relazione alla compatibilità elettromagnetica ed alla sicurezza dei prodotti.
On the approximation of the laws of Member States relating to electromagnetic compatibility and product safety.
Basée sur la législation des États membres relative à la compatibilité électromagnétique et á la sécurité des produits.
Über die Annäherung der Gesetze der Mitgliedsstaaten in bezug auf elektromagnetische Verträglichkeit und Produktsicherheit entsprechen.
Basado en la aproximación de las leyes de los Países Miembros respecto a la compatibilidad electromagnética y las Medidas de seguridad relativas al producto.

Questa dichiarazione è basata sulla conformità dei prodotti alle norme seguenti:
This declaration is based upon compliance of the products to the following standards:
Cette déclaration repose sur la conformité des produits aux normes suivantes:
Diese Erklärung basiert darauf, daß das Produkt den folgenden Normen entspricht:
Esta declaración se basa en el cumplimiento de los productos con las siguientes normas:

**EN 55022 (CLASS A ITE), August 1994**: **AMENDMENT A1 (CLASS A ITE), October 2000:** LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE CHARACTERISTICS OF INFORMATION TECHNOLOGY EQUIPMENT

**EN 61000-6-2, October 2001:** ELECTROMAGNETIC COMPATIBILITY (EMC). PART 6-2: GENERIC STANDARDS - IMMUNITY FOR INDUSTRIAL ENVIRONMENTS.

Lippo di Calderara, October 30th, 2006

Ruggero Cacioppo
Quality Assurance Laboratory Manager

## UPDATES AND LANGUAGE AVAILABILITY

**UK/US**

The latest drivers and documentation updates for this product are available on Internet.
Log on to: www.datalogic.com

**I**

Su Internet sono disponibili le versioni aggiornate di driver e documentazione di questo prodotto. Questo manuale è disponibile anche nella versione italiana.
Collegarsi a: www.datalogic.com

**F**

Les versions mises à jour de drivers et documentation de ce produit sont disponibles sur Internet. Ce manuel est aussi disponible en version française.
Cliquez sur : www.datalogic.com

**D**

Im Internet finden Sie die aktuellsten Versionen der Treiber und Dokumentation von diesem Produkt. Die deutschsprachige Version dieses Handbuches ist auch verfügbar.
Adresse : www.datalogic.com

**E**

En Internet están disponibles las versiones actualizadas de los drivers y documentación de este producto. También está disponible la versión en español de este manual.
Dirección Internet : www.datalogic.com

## COMPLIANCE

### LASER SAFETY COMPLIANCE

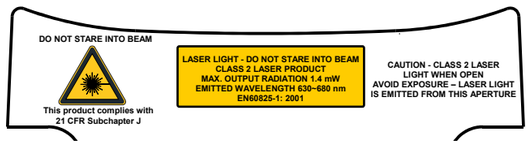
The laser scanner conforms to the applicable requirements of both CDRH 21 CFR 1040 and EN60825-1 at the date of manufacture.

The laser light is visible to the human eye and is emitted from the output window ①.

Laser warning and classification label ②.

**CAUTION:**
Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light.
The laser scanner utilizes a low-power laser diode. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring at the beam as one would with any very strong light source, such as the sun. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces such as mirrors, etc.

The following information is shown on the laser scanner device class label:


DO NOT STARE INTO BEAM
This product complies with 21 CFR Subchapter J
LASER LIGHT - DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
MAX. OUTPUT RADIATION 1.4 mW
EMITTED WAVELENGTH 630~680 nm
EN60825-1: 2001
CAUTION - CLASS 2 LASER LIGHT WHEN OPEN
AVOID EXPOSURE – LASER LIGHT IS EMITTED FROM THIS APERTURE

| | |
|---|---|
| **ITALIANO** | **LUCE LASER**<br>**NON FISSARE IL RAGGIO**<br>**APPARECCHIO LASER DI CLASSE 2** |
| **FRANÇAIS** | **RAYON LASER**<br>**EVITER DE REGARDER LE RAYON**<br>**APPAREIL LASER DE CLASSE 2** |
| **DEUTSCH** | **LASERSTRAHLUNG**<br>**NICHT IN DEN STRAHL BLICKEN**<br>**PRODUKT DER LASERKLASSE 2** |
| **ESPAÑOL** | **RAYO LÁSER**<br>**NO MIRAR FIJO EL RAYO**<br>**APARATO LÁSERDE CLASE 2** |

### LED CLASS

Class 1 LED product.

This product conforms to EN60825-1:2001.

### CE COMPLIANCE

**Warning:**
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### FCC COMPLIANCE

Modifications or changes to this equipment without the expressed written approval of Datalogic could void the authority to use the equipment.

This device complies with PART 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference which may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### POWER SUPPLY

This device is intended to be connected to a UL Listed/CSA Certified computer which supplies power directly to the reader or else be supplied by a UL Listed/CSA Certified Power Unit marked “Class 2” or LPS power source rated 4 - 30 V, minimum 420 mA, which supplies power directly to the reader via the power connector of the cable.

### WEEE COMPLIANCE

### PATENTS

This product is covered by one or more of the following patents:

U.S. patents 5,992,740; 6,305,606 B1; 6,442,180 B1; 6,808,114 B1; and 6,997,385 B2

European patents 789,315 B1; 895,175 B1; and 1,128,315 B1

Additional Patents and Design Patents pending.

## DEFAULT VALUES

**USB-KBD DEFAULT SETTINGS**

USA keyboard, FIFO enabled, inter-character and inter-code delays disabled, USB keyboard speed normal.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, no header, terminator = ENTER, character replacement disabled.

**RS232 Standard DEFAULT SETTINGS**

9600 baud, no parity, 8 data bits, 1 stop bit, no handshaking, delay disabled, rx timeout 5 sec., ack/nack disabled, FIFO enabled, inter-character delay disabled, serial trigger lock disabled.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, no header, terminator = CR-LF, character replacement disabled.

**WEDGE DEFAULT SETTINGS**

USA keyboard, caps lock off, caps lock auto-recognition enabled, num lock unchanged, inter-character and inter-code delays disabled, control character emulation = ctrl+shift+key.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, no header, terminator = ENTER, character replacement disable.

**PEN DEFAULT SETTINGS**

interpret operating mode, conversion to code 39 disabled, output level normal, idle level normal, minimum output pulse 600 µs, overflow medium, inter-block delay disabled.

**CODE SELECTION**

**Enabled codes**

- EAN 8/EAN 13 / UPC A/UPC E without ADD ON
  check digit transmitted, no conversions
- Interleaved 2/5
  check digit control and transmission, variable length code; 4-99 characters
- Standard Code 39
  no check digit control, variable length code; 1-99 characters
- Code 128
  variable length code; 1-99 characters

**Disabled codes:**

*EAN 128, ISBT128, Code 93, Codabar, pharmaceutical codes, MSI, Code 11, Code 16K, Code 49, RSS Codes*

## TECHNICAL FEATURES

**Dragon™ D131/D131 LR**

| **Electrical Features** | | |
|---|---|---|
| Power Supply | 4 to 30 Vdc | |
| Max. Consumption:<br>@ 4V<br>@ 5V<br>@ 30V<br>Sleep mode | <br>420 mA<br>310 mA<br>62 mA<br>4 mA | |
| Scan Rate | 35 ± 5 scans/sec | |
| Reading Indicators | Good Read LED (**green**)<br>Good Read Spot (**green**), **Beeper** | |
| **Optical Features** | **Dragon™ D131** | **Dragon™ D131 LR** |
| Reading Field | 110 cm (43.3 in)<br>@ 55 mils | 225 cm (88.6 in)<br>@ 55 mils |
| Max. Resolution | 0.076 mm (3 mils) | 0.25 mm (10 mils) |
| PCS (Datalogic Test Chart) | 15% | 40% |
| **Laser Features** | | |
| Power (max) | 0.9 mW | 1.4 mW |
| Scan Angle | 42° | 23° |
| Laser Safety Class | Class 2 EN 60825-1/CDRH | |
| **Environmental Features** | | |
| Working Temperature | -30 °C to + 50 °C / -22° to +122 °F | |
| Storage Temperature | -30 °C to + 70 °C / -22° to +158 °F | |
| Humidity | 90% non condensing | |
| Drop Resistance | IEC 68-2-32 Test ED 2 m | |
| Protection Class | IP64 | |
| **Mechanical Features** | | |
| Weight (without cable) | about 295 g (10.4 oz) | |
| Cable Length | 2 m (6 ft 6 in) | |

## RESTORE DEFAULT

**RESTORE DEFAULT**

To change the defaults refer to the Dragon™ D131/M131 Reference Manual, part number **90ACC1929**, or to the Datalogic Aladdin™ Configuration program, both downloadable from the website.

## INTERFACE SELECTION

Select one of the interface codes according to your application.

### USB INTERFACE SELECTION

USB-KBD

USB-KBD-ALT-MODE

USB-COM*

USB-IBM-Hand Held

* When configuring USB-COM, the relevant files and drivers must be installed from the USB Device Installation software, which can be downloaded from the web site http://www.datalogic.com.

### PEN EMULATION INTERFACE SELECTION

PEN

### RS232 INTERFACE SELECTION

RS232 Standard

Nixdorf Mode A

Fujitsu

ICL Mode

### WEDGE INTERFACE SELECTION

Wedge IBM AT or PS/2 PCs

PC Notebook

PC Notebook - ALT mode

IBM AT - ALT mode

Many other interfaces are supported and can be selected from the Dragon™ D131/M131 Reference Manual available online at http://www.datalogic.com. Other supported interfaces:

**USB**: USB-IBM-Table Top; USB-KBD-APPLE

**WEDGE**: IBM XT; IBM SURE1; IBM Terminal 3153; IBM Terminals 31xx, 32xx, 34xx, 37xx; Wyse Terminals ANSI – PC –ASCII – VT220 style Keyboards; Digital Terminal VT2xx/VT3xx/VT4xx; APPLE ADB Bus

## KEYBOARD NATIONALITY

USB-KBD and Wedge users should select one of the following wedge keyboard nationality codes according to the keyboard.

Belge

Deutsch

English

Español

Français

Italiano

Svenskt

USA (Default)

The following Keyboard Nationality selections are only valid for IBM AT compatible PCs:

Japanese

Russian (Latin)

Russian (Cyrillic)

Hungarian

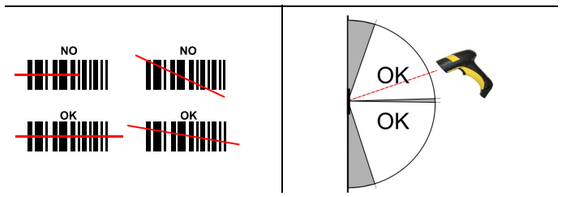
Slovenian, Croatian, Serbian (Latin)

Romanian

Czech Republic

## USING DRAGON™ D131/D131 LR READERS

Dragon™ D131 readers automatically scan barcodes **at a distance.** Simply aim and pull the trigger. Code scanning is performed along the scan line emitted from the reading window. This line must cross the entire code. The best reading angles are indicated in the figure below.




## AIMING SYSTEM

Dragon™ D131 and Dragon™ D131 LR provides an aiming system. If enabled, a partial trigger press produces a red spot, which should be aimed over the code center to get the best reading performance (see figure above, ①). By completely pressing the trigger the scan line appears to start code scanning ②.

After setting up the reader, you can enable or disable the aiming system by reading the codes below:

Disable Aiming System (Default)

Enable Aiming System

## DATA FORMAT TERMINATORS

For your convenience, some common Terminators are given below. For other Header/Terminator selections, Data Format and Advanced Data Format parameters, see the Dragon™ D131/M131 Reference Manual.

CR-LF

Enter

Tab

None

## OPERATING TEST

Read the TEST code below.

**Code 128**

t e s t